plan database taking any of 5 long-acting ADHD medications to determine daily average consumption (DACON; pills per day) and ADHD pharmacy costs for LDX compared with other therapies. **METHODS:** ADHD subjects aged 18–55 years with at least one prescription for atomoxetine (n = 513), methylphenidate (n = 546), dexmethylphenidate (n = 124), mixed amphetamine salts (n = 1,514), or LDX (n = 246) from July 1, 2007 through October 31, 2007 were studied retrospectively. Subjects were continuously enrolled for 6 months before (baseline) and 6 months after (follow-up) their first qualifying prescription. Subjects with an ICD-9 code for ADHD, but with no ADHD prescriptions at baseline, were retained. Means were compared using student's t-test, proportions using chi-square, and ADHD medication costs in the follow-up period using Wilcoxon Mann Whitney test. **RESULTS:** The median number of LDX prescriptions (4) and days supplied (113) were highest ($p < 0.0001$) compared with all other medications in the follow-up period. Mean DACON was lowest for LDX (1.06; $p < 0.0001$) and LDX had the highest proportion of patients (87.4%) with a DACON ≤ 1. Higher DACON was associated with higher median cost for all drugs ($p < 0.0001$ for each), but incremental costs were lowest for LDX. **CONCLUSIONS:** Compared with four other drugs, LDX users had the lowest DACON, the highest proportion of patients with a DACON ≤ 1, and longest therapy use in the follow-up period, suggesting both real-world effectiveness and the possibility of better patient compliance with LDX. Supported by funding from Shire Pharmaceutical Development Inc.

PMH35

NATIONAL ESTIMATES OF HEALTH SERVICE USE AND COSTS IN CHRONIC MEDICAL DISORDER PATIENTS WITH AND WITHOUT DEPRESSION IN 2004–5

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OBJECTIVES: To inform providers and payers on the impact of depression in chronic medical disorders (CMD) in the United States (US), we studied national estimates of health service use and related costs in CMD patients with and without depression. **METHODS:** For the retrospective analysis, we extracted data on >/=18 year-old employed adults from the pooled 2004–5 Medical Expenditure Panel Survey. Data included ICD-9-CM-coded CMD (hyperlipidemia, heart disease, arthritis/other joint-disorders, chronic obstructive pulmonary disease, hypertension, or diabetes), depression, health service use (ambulatory, in-patient, and emergency department visits and prescription medications) and related costs adjusted to 2005 US dollars. We weighted sample estimates and 95% confidence limits (CL) using the Taylor expansion method. For CMD patients with and without depression, in univariate analyses using t-tests, we compared the mean number of ambulatory, in-patient, and emergency department visits and prescription medications and related costs. **RESULTS:** On an average, CMD patients with depression (n = 999) did significantly differ from those without depression (n = 8739) by number of ambulatory visits (7.5, 95% CL: 6.9–8.1 vs. 4.6, 95% CL: 4.4–4.8, $p < 0.001$) and related costs ($973, 95% CL: 867–1,094 vs. $567, 95% CL: 534–601 $p < 0.001$) and by number of prescription drugs used (16.8, 95% CL:15.2–18.5 vs. 9.2, 95% CL:8.9–9.6, $p < 0.001$) and related costs ($1,012, 95% CL:918–1117 vs. $469, 95% CL: 442–497, $p < 0.001$). However, CMD patients with depression did not significantly differ from those without depression for average number of inpatient hospital days or emergency department visits ($p > 0.05$). **CONCLUSIONS:** Compared with CMD patients without depression, those with depression report 1.6- and 1.7-times higher ambulatory visits and related costs, and 1.8- and 2.2-times higher mean number of prescription medications and related costs. Factors associated with significant increases in health service use and related costs in CMD patients with depression than those without depression need further study.

PMH36

COMPARISON OF HOSPITALIZATIONS AND HEALTH CARE COSTS OF ELDERLY MAJOR DEPRESSIVE DISORDER (MDD) PATIENTS TREATED WITH ESCITALOPRAM, GENERIC SSRIS, OR SNRIS

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OBJECTIVES: To examine hospitalization use and health care costs of elderly MDD patients treated with escitalopram compared to those treated with either generic SSRIs or SNRIs. **METHODS:** Elderly MDD patients (age 65) initiated on escitalopram, a generic SSRI, or SNRIs were identified in the Ingenix Impact Database (2003–2007). Hospitalization rates, length of stay, and health care costs were examined over the 6-month period following therapy initiation (analysis period). Logistic and negative binomial regressions were used to compare the rate and days of hospitalization, respectively. Wilcoxon tests were used to compare costs descriptively. General Linear Model regression was conducted to control for patient characteristics including demographics, comorbidities, and baseline medical resource use. **RESULTS:** A total of 1850 elderly patients initiated on escitalopram, 2668 on generic SSRIs, and 1053 on SNRIs. Escitalopram patients had higher comorbidities, health care utilization, and costs at baseline than generic SSRI and SNRI patients. Logistic regression showed that escitalopram patients were less likely to be hospitalized in the analysis period than generic SSRI (OR = 0.81, $P = 0.0071$) or SNRI patients (OR = 0.88, $P = 0.1870$). Negative binomial regression showed that escitalopram patients had fewer hospitalization days than generic SSRI (IRR = 0.79, $P = 0.0416$) and SNRI patients (IRR = 0.74, $P = 0.0442$), which translated into 54.0 and 70.6 more days per 100 patients for the generic SSRI and SNRI patients over 6 months, respectively. Escitalopram patients had a $3,758 cost reduction during the analysis period, significantly greater than the cost reductions for generic SSRI and SNRI patients of $951 and $562, respectively (both $P < 0.0001$). GLM regression indicated that the 6-month risk-adjusted total health care costs for escitalopram patients were $985 ($P = 0.0758$) and $1,889 ($P = 0.0080$) lower than for generic SSRI and SNRI patients, respectively. **CONCLUSIONS:** Compared to elderly MDD patients initiated on either generic SSRIs or SNRIs, patients initiated on escitalopram had significantly fewer hospitalization days and lower health care costs.

PMH37

DISCRETE EVENT SIMULATION COMPARING QUALITY OF LIFE AND COSTS BETWEEN OLANZAPINE AND QUETIAPINE XR TREATMENT FOR SCHIZOPHRENIA IN MEXICO

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OBJECTIVES: To determine Quality of Life related to adverse reactions and costs using Olanzapine or Quetiapine XR in the treatment of Schizophrenia from an institutional perspective. **METHODS:** A Discrete Event model using Arena software was designed to calculate costs and Quality of Life (QoL) of Schizophrenia patients. Hospitalization costs and time between relapses were obtained from an observational study performed in the Mexican Social Security Institute. This information was used to calculate random distributions for the model. Maintenance treatment costs were calculated using recommended doses and institutional drugs' costs. Random distributions for adverse reactions were obtained from literature. QoL was assessed each year and costs were calculated for each patient applying a 3% discount rate. The model was run with five hundred patients for each cohort during a six-year period. A single variable sensitivity analysis was performed to evaluate the effect on compliance since the extended release formulation of Quetiapine is expected to improve compliance. Results are presented in US dollars with an exchange rate of 13.5 MXN pesos for 1 US dollar. **RESULTS:** Annual average cost of treatment for Olanzapine cohort was $4,851 (95% CI, $4,632–$5,085) and for Quetiapine XR cohort $4,533 (95% CI, $4,334–$4,750) Average QoL for Olanzapine was 0.840 (95% CI, 0.839–0.842) and for Quetiapine was 0.859 (95% CI, 0.857–0.861). The sensitivity analysis results showed a better QoL at a lesser cost in the worst assessed scenario with 60% compliance in the Quetiapine XR cohort and 80% compliance in the Olanzapine cohort. **CONCLUSIONS:** Quetiapine extended release is an atypical antipsychotic with less adverse reactions than Olanzapine that results in a better Quality of Life for patients with schizophrenia at a lesser cost for the institution.

PMH38

THE ECONOMIC IMPACT OF GENERIC SWITCHING FOR PATIENTS WITH MAJOR DESPRESSIVE DISORDER (MDD) TREATED WITH ESCITALOPRAM OR A PATENTED SSRI

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OBJECTIVES: To compare economic outcomes of MDD patients who were treated with a patented SSRI (escitalopram, citalopram, sertraline, or paroxetine controlled-release) and were switched to a generic SSRI for non-medical reasons vs. those continuing on the patented SSRI. "Therapeutic substitution," defined as change from a branded product to a different generic compound in the same class, is a common practice encouraged by low co-pay for the generic products. **METHODS:** Adult MDD patients from the Ingenix Impact Database (2003–2007) were considered "switchers" if they were treated with a patented SSRI and switched to a generic SSRI. Those who had an MDD-related urgent care (hospitalization or emergency room) or psychotherapy visit in the seven days prior to switching were excluded. Patients who remained on the patented SSRI ("non-switchers") were matched 1:1 to switchers. All-cause, mental health and MDD-related urgent care costs over six months were compared between switchers and non-switchers and regression models controlled for baseline differences. A subgroup analysis was conducted for patients treated with escitalopram. **RESULTS:** The study included 4449 matched pairs, 3304 (74%) of whom started on escitalopram. Compared to non-switchers, switchers had higher risks of all-cause and mental health-related urgent care use (OR = 1.15 and 1.34, respectively, $P < 0.01$) and higher risk-adjusted MDD-related medical costs ($222, $P < 0.05$). In escitalopram subgroup analyses, compared to non-switchers, switchers from escitalopram had even higher risks of all-cause (OR = 1.21) and mental health-related urgent care use (OR = 1.41, both $P < 0.01$) and higher MDD-related medical costs ($151, $P < 0.05$). **CONCLUSIONS:** Compared to patients who continued on escitalopram or patented SSRIs, patients who switched to a generic SSRI incurred more urgent care resource use and higher MDD-related health care costs. The effects of "therapeutic substitution" should be carefully examined because increasing utilization of drugs with lower acquisition costs may not be a cost-saving strategy, when total health care costs are considered.